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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Takayuki Ono

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EXAMINER

PATEL, GAUTAM

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/625,005	ONO, TAKAYUKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gautam R. Patel	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### Response to Amendment

1. This is in response to amendment filed on 9/27/06.
2. claims 1, 3-6 and 8-9 remain for examination.

### Drawings/Objection

3. The drawings are objected for following reasons:

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore,

“a jump signal applying means,

a timing setting means,

a level determining means; and

a level varying means” must be shown or the features cancelled from the claims.

### No new matter should be entered.

Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must consist of following:

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may be *accompanied by a marked-up copy of one or more of the figures being amended, with annotations*. Any replacement drawing sheet *must be identified in the top margin as “Replacement Sheet”* and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. *Any marked-up (annotated) copy showing changes must be labeled “Annotated Marked-up Drawings” and accompany the replacement sheet in the amendment (e.g., as an appendix).*

a proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Correction may not be held in abeyance.

Correction are required.

### Claim Rejections - 35 U.S.C. § 112

4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it

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is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

A brake signal for making focus jump to a drive signal for controlling driving of light emitting means required by the claims is not described in the specification.

On page 11, lines 10-28 the specification mentions two-function driver 18 which receives the focus drive signal FD. And emission of LD 4 is driven by driver 20. and servo generates a laser drive signal to execute laser beam emission of pickup, but does not explain what these signals are and how focus jump is related a to drive signal for controlling light emitting means.

Accordingly, the specification does not explain to one of ordinary skill in the art at the time of the invention, how to make and or use the invention comprising the claimed brake signal for making a focus jump to a drive signal for controlling driving of light.

Similarly time setting means for variably setting a timing of applying said brake signal by said jump signal applying means on the basis of said focus error is very confusing. It is not clear at all what is driving what and based on what. How can a jump signal applying means can supply a brake signal.

Claims 5 and 9 has the same problem.

5. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 6-10 is confusing and unclear. It is not clear at all what is means by “at the time of making said laser beam to be emitted focus-jump from a recording layer to another r layer, for applying a brake signal for making a focus jump...”.

Similarly, time setting means for variably setting a timing of applying said brake signal by said jump signal applying means on the basis of said focus error is very confusing. It is not

clear at all what is driving what and based on what. How can a jump signal applying means can supply a brake signal. And if it is applying a brake signal, it not described in the specification.

### Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, as best understood, are rejected under 35 U.S.C. § 102(b) as being anticipated by Iida et al., US. patent 6,061,310 (hereafter Iida).

As to claim 1, Iida discloses the invention as claimed [see Figs. 4 & 12-14] including jump signal applying means and timing setting means, comprising:

jump signal applying means [fig. 4, units 1, 10, 14 & 18], at the time of making said laser beam to be emitted focus-jump from a recording layer to another recording layer, for applying a brake signal for making a focus jump to a drive signal for controlling driving of light emitting means which is preliminarily provided to emit said laser beam [col. 10, lines 1-33]; and

timing setting means [fig. 4, units 10, 11 & 14] for variably setting a timing of applying said brake signal by said jump signal applying means on the basis of level of said focus error signal of said recording layer as an object of the focus jump [col. 18, line 46 to col. 19, line 45].

7. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Iida:

level determining means [fig. 4, units 10 & 14], for determining whether the level of said focus error signal of said recording layer as an object of a focus jump reaches level specifying the timing of said focus jump or not; and

level varying means [fig. 4, units 11], for lowering said specification level in accordance with determination made by said level determining means that the level of said focus error signal does not reach said specification level [threshold level TH-H and TH-L] , and when it is determined by said level determining means that the level of said focus error signal reaches said

specification level, said brake signal is applied by said jump signal applying means [col. 19, line 49 to col. 21, line 64; figs. 12-14].

8. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Iida:  
said brake signal includes an acceleration pulse signal for starting acceleration regarding the focus jump and a deceleration pulse signal for starting deceleration to be applied within a specific time-out period [T, LM1 and LM2] [col. 17, lines 41-61] after application of said acceleration pulse signal, and said level determining means determines whether the level of said focus error signal reaches said specification level within said-specific time-out period or not [col. 19, line 49 to col. 21, line 64; figs. 12-14].

9. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Iida:  
said specific time-out period is set on the basis of a period in which said another recording layer as a destination of the jump can be irradiated with said laser beam [col. 19, line 49 to col. 21, line 64; figs. 12-14].

10. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Iida:  
a focus controller [fig. 4, unit 3] for controlling focus of a laser beam emitted to reproduce information onto an optical disk [fig. 4, unit D] in which a plurality of recording layers [fig. 1, layers 102 & 103] are formed on the basis of a focus error signal indicative of a deviation amount from a focus state in any of said recording layers of said laser beam [col. 8, line 49 to col. 10, line 33]; and

light irradiating means [fig. 4, unit 4] for irradiating said optical disk with said laser beam, wherein said focus controller includes:

jump signal applying means [fig. 4, units 1, 10, 14 & 18],, at the time of allowing said laser beam emitted to make a focus jump from a recording layer to another recording layer, for applying a brake signal for making the focus jump to a drive signal for controlling driving of said light emitting means [col. 10, lines 1-33];; and

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timing setting means [fig. 4, units 10, 11 & 14] for variably setting a timing of applying said brake signal by said jump signal applying means on the basis of level of said focus error signal of said recording layer as an object of the focus jump [col. 18, line 46 to col. 19, line 45].

11. As to claims 6 and 8-9, they are method claims corresponding to an apparatus claims 1 and 3-4 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 1 and 3-4 respectively, above.

12. Applicant's arguments filed on 9/27/06 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "The drawings were objected ...

Paragraph [0069] in the published Specification discloses that "servo processor 31 applies an acceleration pulse PL1 in Fig. 5 as a focus jump braking signal to focus drive signal FD, so that the servo system starts moving optical pick up 1 (S4)." The servo processor 31 is clearly shown in Figures 1 and 2." [page 9, paragraph 5; REMARKS].

FIRST: What is being claimed is "a jump signal applying means", and NOT a servo processor. Therefore a jump signal applying means must be shown.

SECOND: Figure 5 is related to pulse shape not lump signal applying means.

THIRD: What is being claimed must be shown. As a matter of fact these words "a jump signal applying means" does not even show up in nay place in detailed description. There is no language to show any correlation between this jump means and servo processor. The examiner agrees that servo does provide this function, but claim 1 is an apparatus claim and it is clearly claiming an apparatus called "a jump signal applying means". The step 4 that is being argued above relates to a method claim NOT an apparatus claim.

Therefore this part must be shown or the feature cancelled from the claim.

B) That; "Paragraph [0067] in published Specification...

Paragraph [0068] ..

Paragraph [0031]" [page 10, paragraph 1-3; REMARKS].

The arguments in paragraph 12 section A) above are similarly applicable to these arguments regarding a timing setting means, a level determining means and a level varying means.

C) That: "The examiner asserts that the brake signal in the claim is not described in the specification. Applicant submits that paragraph [0034] clearly discloses that "the brake signal includes an acceleration pulse signal for starting acceleration regarding the focus jump and a deceleration pulse signal for starting deceleration." In the specification, acceleration signal PL1 and deceleration signal PL2 are described in sufficient detail to enable one skill I the art to make and use the claimed invention ..".

FIRST: Te examiner is referring to "**a brake signal for making focus jump**" to drive a signal for controlling driving of light emitting means, not a brake signal alone.

SECOND: What else the brake signal does is irrelevant at this point because acceleration and/or deceleration aspects of the brake signal are not claimed.

THIRD: Brake signal in known for acceleration etc., but it not clear at all how it is related to a focus jump. Brake signal is applied after the jump takes place and focus is adjusted. The specification clear about the application of brake signal, the claim is not clear at all. [page 11, paragraph 3; REMARKS].

D) That: "With respect to time setting means, amended claim 1 recites that the time setting means includes both the level determining means and the level varying means. Figure 4 and paragraph [0066]-[0076] of the published application ..." [page 12, paragraph 2]; REMARKS].

FIRST: Careful examination of amended claim 1, shows that time setting means is NOT defines as to include both the level determining and varying means.

SECOND: Also paragraphs 0066 to 0076 does not describe these aspects.

THIRD: Time setting means is NOT shown in figure 4 at all for simple reason it is a method figure and NOT and apparatus figure.



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E) That: "In fact, Iida does not contemplate the case where a focus error signal does not reach a predetermined specification level, and thus clearly fails ...

There seems to be a problem of semantics here. Iida clearly shows this so called "predetermined specification level". Iida calls it threshold level.

13. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

#### **Contact information**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

  
**GAUTAM R. PATEL**  
**PRIMARY EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2627

November 1, 2006